

BUREAU OF ENVIRONMENT

CONFERENCE REPORT

DATE OF CONFERENCES: March 2 and 9, 2006

LOCATION OF CONFERENCES: J.O. Morton Building

ATTENDED BY: Christine Perron, Kevin Nyhan, Marc Laurin, Mark Hemmerlein, Russ St. Pierre, Dennis Danna, Chris Waszczuk, John Kallfalz, Nancy Mayville, NHDOT; Jim Garvin, Linda Wilson, Emily Paulus, Beth Muzzey, and Edna Feighner, NHDHR; Harry Kinter and Ed Woolford, FHWA; Jamie Paine, CLD; Mike Desrochers, Edwards and Kelcey; Peter Howe, FST; John Watters and Addie Kim, HNTB; Lynne Monroe, Preservation Company; Tom Levens, Holden Engineering; Liz Hengen, Preservation Consultant; Lisa Mausolf, Preservation Consultant; Lynne Monroe and Carol Hooper, Preservation Co.; Charlie Freiberg, Photographer; Rich Casella, Engineering and Architectural Historian; and Ron Joy, McFarland Johnson.

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

NOTES ON CONFERENCE

Thursday, March 2, 2006

Jaffrey Surplus Land. Participant: Christine Perron.

This 0.975-acre parcel is located in Jaffrey at the end of Union Street and adjacent to the Monadnock Branch RR Corridor. The Town of Jaffrey wishes to purchase this land. A warehouse-type structure, once owned by the local factory DD Bean and most recently owned by the Town of Jaffrey, was removed from this parcel recently. E. Feighner requested that historic maps of the area be provided. H. Kinter requested more information regarding the structure that was removed, including who removed it, why, and when. This information was provided later in the day, and it was then determined that the parcel could be sold to the town with the condition that the town pay for an archaeological survey if use of the property requires any excavation.

Gorham, X-A000(238), 14204. Participant: Kevin Nyhan.

K. Nyhan confirmed the recreational *de minimis* finding relative to 4(f) and easement on the Grace Peabody Memorial Park with H. Kinter. The No Historic Properties Affected memo was signed.

Merrimack, STP-TE-X-000S(434), 13494. Participant: Mike Desrochers and John Blackburn, Edwards and Kelcey (mdesrochers@ekmail.com).

The purpose of the meeting was to present the above noted project at the Cultural Resources Meeting to determine the impacts, if any, that are generated by the project.

M. Desrochers presented the project. The project will construct a paved sidewalk on the east side of US 3 from the former Harcross property to the Classic Gas property, and a paved sidewalk on the west side of US 3 along the Connell's Plaza frontage to meet with an existing sidewalk. The project also proposes to replace the existing traffic signal with new hardware and crosswalks. The area is urban in character with commercial development along both sides of US 3.

Harry Kinter, (FHWA) questioned the use of TE funding for signalization improvements and noted the change in scope in comparison to the original grant. He and EK will coordinate with Ram Madali, TE Coordinator at NHDOT, to resolve the conflict.

Buildings in the vicinity of the project that appear to have been constructed before 1960 include two buildings (Connell and Southeast Regional Education) along the west side of US 3 just south of Connell's Plaza and a building (Gaumont) in the southeastern corner of the intersection with Loop Road. There is no proposed work in front of the two buildings on the west side of US 3, and the existing edge of pavement will remain in place. There is a proposed sidewalk in front of the Gaumont parcel, which will be constructed entirely within the existing right-of-way. There are no proposed slope or construction impacts to the parcel, and the work will reduce the width of US 3 pavement in front of the building.

Stating that the project has No Adverse Effect on the cultural resources present, a Cultural Resource Memorandum of Effect was signed at the meeting.

Portsmouth, STP-X-5379(027), 13523. Participant: Peter Howe, FST.

FST gave an update on the project, which reconstructs the sea wall along New Castle Avenue. The project bids were open on February 16, 2006. There were two bids submitted, with only one bid being opened. The second bidder was determined not to be pre-qualified by the NHDOT, and therefore, his bid was not opened. The low and only bidder was just over twice the amount of the available budget and current office estimate.

Because of budget constraints, the City is proposing to redesign the seawall to reduce project costs, so that the deteriorating seawall can be reconstructed within the available funding. Therefore, FST has re-evaluated several seawall options, and presented two pre-cast options at the meeting. The options presented were T-wall and Stone Strong, both pre-cast gravity walls, and both to be capped with a cast-in-place concrete cap/sidewalk, with ornamental railing.

In addition to the change in wall type, the sequence as originally dictated by the environmental permitting constraints is being revisited, and a request has been submitted to the NHDES for consideration of an alternate procedure/sequence.

As currently contemplated, it was concluded that the project would have an adverse effect on the sea wall. However, because the document has been completed and the project is about to advertise, part 13 of the Advisory Council regulations (36 CFR 800) permit the project to go forward without a MOA if both the federal agency and SHPO concur with the mitigation for the adverse effect. Both parties concurred.

During the course of the meeting, the committee indicated that the seawall would need to be

documented before removal. They requested that the City contract with an architectural historian, to provide photograph records, using large format black and white photographs, with a scale stick, prior to the start of construction. The architectural historian should also describe the wall, and either the architectural historian or archaeologist should detail its history. The archaeological mitigation will proceed as already defined. This information would be compiled into a state-level HAER document.

Hampton, X-A000(229), 14188. Participant: Russ St. Pierre and Steve Boyington.

Russ St. Pierre presented the proposed project to rehabilitate the existing bascule lift bridge carrying NH Route 1A over the Hampton River in Hampton, NH. The bridge was constructed in 1949 and rebuilt in 1984. Steve Boyington described the Department's intent to repair the concrete deck, sidewalk, and steel structural members as warranted, and to paint the bridge. It was noted that when the Department replaced the Scammell Bridge in Dover, another bascule lift bridge, it committed to the long-term maintenance and preservation of the two remaining bridges of this type. This project is in keeping with that commitment.

It was also noted that there is local interest in replacing the bridge with a wider, high-span structure that would eliminate the need for a lift span. To this end, they have begun the process of trying to secure Federal earmarked funding to support the project.

After discussion, it was determined that the project as presented would have "No Adverse Effect" on historic resources. The Department will continue to consult with the SHPO as the project advances and specific design elements are developed.

Newington-Dover, NHS-0271(037), 11238: Participants: Marc Laurin and Chris Waszczuk.

Though not part of the Department's preferred alternative, C. Waszczuk stated that the alternative that removes the General Sullivan Bridge (GSB) is documented in the DEIS. Should the GSB be removed pedestrian/bicycle access would need to be provided on the widened Little Bay bridges, at an estimated cost of \$8 to \$10 million, in addition to the \$12 million removal cost for the GSB. As the rehabilitation of the GSB is estimated at \$22 million, the net cost to preserve the GSB would therefore be around \$10 million.

H. Kinter agreed that it's appropriate to the Section 4(f) discussion to include this alternatives in the DEIS. However, he thought that the discussion of mitigation for this alternative would be moot. M. Laurin inquired whether the Effect Memo was then incomplete since it does not specifically address the alternative that removes the GSB. H. Kinter stated that the memo satisfies the Section 106 requirements by addressing the specific effects of the project, and there would be no need to discuss this alternative in the memo. All agreed that there is no need to include the removal of the GSB in the memo. C. Waszczuk stated that the prudence discussion will be in the DEIS, with the conclusion that the consequence of FHWA not participating makes it imprudent to pursue this alternative.

Andover, X-A000(183), 14057A. Participants: Kevin Nyhan.

Kevin Nyhan revisited this project, which is currently under construction along NH Route 11 in Andover. The Department proposes to repair flood-damaged ditches and associated drainage work within the East Andover Agricultural Historic District on the Hersey property. An easement will be required. K. Nyhan detailed two proposals. The first would require less of an easement on the property to repair the damage, but would have required more use of erosion stone. The second would repair the damaged area with a greater easement, but with less erosion stone and more humus and turf establishment. Everyone in attendance agreed that the greater easement would be more appropriate as it allows for a more natural appearance with less erosion stone and more turf establishment. These minutes will be used to record this decision rather than a revised memo.

Portsmouth, BHS-X-T-0101(015), 13678. Participants: Kevin Nyhan and Nancy Mayville, NHDOT; Lynne Monroe, Preservation Company; and Addie Kim (akim@hntb.com) and John Watters, HNTB.

The purpose of this meeting was to review the alternatives under consideration and discuss cultural resource impact assessment method for the Memorial Bridge rehabilitation.

John Watters reviewed the work proposed. For the Kittery approach span, extending between Badger's Island and the truss span of the Memorial Bridge, the concrete deck will be retained and there will be localized repair and patching on the deck. The timber sidewalks will be replaced with concrete. There will be localized repairs and painting of steel sidewalk railing that has rusted. Below the roadway, there will be steel repairs and painting. On the concrete substructure that has experienced spalling and cracking, sealing and repairs will be performed. There will be milling and replacement of the first more than 40 feet of the roadway on Badger's Island. Harry Kinter inquired whether potholes will be replaced and whether the railing will be rehabilitated off site. John Watters indicated that rehabilitation of the railing will most likely be done on site. A new deck surface would be installed on the truss spans, and the potholes will be fixed on the approach span in Kittery, Maine. The cost of the proposed alternative is approximately \$35 million.

John Watters explained that six alternatives for the Memorial Bridge, three involving bridge rehabilitation and three involving replacement, were evaluated, in addition to the No Build alternative. Plans and renderings of the alternatives were distributed. He indicated that a matrix of these alternatives has been prepared that will be used in the March 9th Effects meeting, with the effects on each historic component listed (Scott Avenue/Memorial Park, Memorial Bridge Lift Span, Memorial Bridge Truss Spans, Kittery Approach Span). It was discussed that additional columns will be added to the matrix for the Badger's Island roadway and Bridge and the John Paul Jones Memorial Park.

John Watters described the replacement of the lift span. The existing riveted steel is no longer manufactured, so the replacement would have the same geometric dimensions, but reduced bracing, so there would be more solid shapes. On the new lift span, there would be upper and lower bracing, but no diagonal bracing. Jim Garvin noted that the gusset plates that were welded or bolted would not be incorporated into the new lift span and that the original deck was made of solid wood, which was later replaced with steel. Harry Kinter inquired whether the rehabilitation would be performed off site. John Watters indicated that the rehabilitation would be performed on site.

Under both the lift span rehabilitation and lift span replacement alternatives, the machinery would be replaced, and the operator's control house would be moved to the south tower, but the machinery in the control house would remain on top of the vertical lift. A question was asked as to how the electrical connection would be made between the operator and the lift span. John Watters indicated that the cables would droop between the lift span and operator's house. Jim Garvin had a question on the 3-wire trolley system dated from the original construction. John Watters was unsure if the original 3 wire system was still in place. Most likely the original wires have been replaced.

John Watters indicated that the deck would be replaced on the truss spans, which is now a 6 ½-inch solid deck. Jim Garvin suggested that there would need to be an increase in the counterweight of the bridge, for example by adding additional concrete to the sides and bottom of the counterweight. John Watters stated that the lifting mechanisms including the trunnions, sheaves, ropes, and machinery had already been replaced and would be replaced under this project. He further indicated that the railing on the truss spans would be repaired. Harry Kinter indicated that the only difference would be the aesthetics of the product, and inquired whether there were other utilities carried across the bridge. Jim Garvin inquired whether CATV was carried across the towers. Harry Kinter indicated that there were no underwater utilities.

John Watters stated that the Scott Avenue approach was significantly deteriorated. HNTB had looked at multiple alternatives, and the city preferred the two-span bridge. It allows more space for improvements and enhances safety.

Nancy Mayville indicated that the City of Portsmouth owns the Scott Avenue Bridge and would pay 20% in matching funds for the bridge replacement. The lift span is split between New Hampshire and Maine, and the Maine approach would receive 80% federal funding and 20% Maine funding. She indicated that a public informational meeting and presentation on the results of the alternatives screening and Environmental Study Report is scheduled for Thursday, April 6th. Harry Kinter indicated that the rehabilitation is the preferred alternative under Section 106, and Jim Garvin concurred. Nancy Mayville indicated that a NHDOT Commissioner's briefing is scheduled for March 20th, and a meeting with Maine DOT will be held on March 29th to receive inputs on the preferred alternative.

Jim Garvin questioned whether improvements beyond strengthening were needed. John Watters indicated that lift span replacement would be more costly and corrosion is built up on the existing lift span. The replacement lift span would have less rust-sensitive details and would operate longer in the long-term, as far as cost-benefits.

Joyce McKay inquired whether the state border would factor into determinations. Harry Kinter responded in the negative. Joyce McKay reiterated that the evaluation would look at impacts on the entire bridge historic district, as NH DHR decided that the bridge would be considered as one district. Jim Garvin noted that Memorial Park, as part of the historic district, has already been compromised. He wondered about the city's plans for the park. Harry Kinter responded that the impact to the park could be viewed as temporary, and it could be restored to its current or original configuration. Harry Kinter indicated that this would probably not require a Section 4(f) Evaluation because there would be no taking. However, after discussions with Kevin Nyhan after the meeting, it was determined that a Section 4(f) Evaluation would be needed based on the replacement of the Scott Avenue Bridge. Nancy Mayville indicated that how the park would be restored would be up to the city. Their decision could have effects on the district, although this now sounds much less likely. The city has indicated that they would like to eliminate some of the entrances to the park and parking lot and create additional grassed area as part of the memorial

site and move the parallel parking on the side. This would increase, rather than decrease, the area of the park.

Nancy Mayville indicated that the project was originally scheduled to be advertised in 2007 and this has been shifted to 2008. The local legislative group is concerned regarding the effect of bridge restrictions on mutual aid agreements, since Portsmouth consists of old wood buildings and the bridge is used by first responders. She is preparing applications for special earmarked funds, and the schedule for the project has been accelerated to potentially accommodate the 2007 advertise date.

Lynne Monroe indicated that in Maine, there is an eligibility form for the John Paul Jones Memorial Park, and the two other elements are referenced as National Register eligible, but have no form. Joyce McKay asked Lynne Monroe to prepare the tops of the yellow eligibility sheets for individual properties within the district and for the district as a whole for the effects meeting next week. Jim Garvin indicated that there is one district for the Memorial Bridge that extends from Wright Avenue in Portsmouth to Government Street in Kittery, and this entire district would also be considered in the impact evaluation.

Hancock 14556 (FEMA). Participant: Tom Levins, Holden Engineering, and Kurt Grasset, Town Road Agent.

Tom Levins presented the proposed plan. The plan includes constructing a new pre-cast concrete box culvert in place of the temporary Bailey bridge over Ferguson Brook (141/047). The Bailey bridge was constructed in October 2005 when flooding caused the existing metal pipe arch structure to collapse. The metal pipe arch was constructed in 1988. The bridge and roadway will be constructed on the current alignment, and the road will be closed during construction. Cavender Road is currently a dead end. The covered bridge over the Contoocook River east of Ferguson Brook is currently open to pedestrian traffic only.

The Town of Hancock is poised to have a fire truck positioned on the east side of Ferguson Brook for fire safety and also rental vehicles to lessen the burden of the road closure to the affected three affected.

It was determined that the proposed project would have no adverse effect on cultural resources.

Thursday, March 9, 2006

Bedford, X-A000(297), 13692A. Participant: Marc Laurin and John Kallfelz.

This project consists of improvements for the NH 101 intersection with Hardy and Jenkins Roads in Bedford, which has been identified by the Town as its most hazardous intersection. As such this project has a somewhat accelerated time frame with a hearing in September 2006 and advertising for construction in the fall of 2007. Presently, the NH Route 101 approaches consist of one lane and a left-turn storage lane in each direction. Due to the volume of traffic on NH Route 101 and the poor sight distance, left turns out of Hardy Road are not allowed. J. Kallfelz described the proposed improvements. They will include a five-lane section on NH 101 (two through with a left turn lane) with a raised median on NH 101 in each direction, signalization of the intersection, and minor approach work on Hardy and Jenkins Roads. Widening along NH 101

will be limited to 15 to 20 feet on each side. The NH 101 approach work will extend for approximately 1,000 to 1,200 feet. A private development, a supermarket, is being proposed off Jenkins Road, in the southeast quadrant of the intersection. If constructed, access to this development would occur from Jenkins Road.

One house older than 50 years, a raised cape that is presently a kennel, is located at the northwest quadrant. Parking appears to be occurring within the ROW of NH 101. The proposed improvements would impact the property and access to a driveway located off Hardy Road. H. Kinter wondered if this property was previously reviewed when the existing left turn lanes were established. J. Kallfelz replied that he did not think there was any previous information on this property. J. Garvin stated that a lot of modifications to the house have occurred, and it appears that it would not be eligible. It was agreed that a form front or reconnaissance level form should be completed for this property. The research should include checking with DHR to see if an earlier form was completed for or any inquiry made about this property. If a form exists, the information should be updated, especially physical changes to the buildings and additions to the property.

Belmont Surplus Land (SP-2006-2). Participant: Mark Hemmerlein.

The Department has been asked to lease a portion of railroad right-of-way to allow docks or moorings on Lake Winnisquam. The group reviewed the plans and aerial photographs and determined the project would not affect archaeologically sensitive areas since the railroad had added fill into the lake on which to create the bed for the tracks. There are no structures on the parcels.

Black and White Photographs. Participants: Beth Muzzey, Lynne Monroe, Lisa Mausolf, and Rich Casella.

It was noted that there are different needs for different areas of preservation work: survey, nomination, and HAER/HABS documents. This discussion was intended to focus on survey.

The discussion opened with a consideration of black and white vs. digital. Henry Wilhelm has developed standards for the permanence of photographic materials. Several longer-lasting papers were noted including Fuji Crystal Archival paper. Wal-Mart uses this type of paper. It was noted that Epsom appears to be the leader in long-lasting papers and inks.

Almost all commercial operators now print black and white negatives on color papers. In fact, they also process the negatives used chemicals appropriate for color photos. The use of color chemicals tends to eliminate the gray tones, producing images with little detail.

Rich Casella presented a process that would retain the black and white negatives but that would be printed through the computer with long-lasting inks and papers. They are estimated to have a 200-year life span. The process is as follows:

1. Take 35 mm photographs using TMAX, Tri-X, Plus-X, or similar black and white film. The negatives should be placed in the archivally stable paper holders, not the plastic ones.
2. The negatives are processed, scanned, saved in a TIFF file, and placed on disc. This part of the process can be done in a photo lab. Discs are now made that last up to 300 years.
3. For printing, stable inks and paper are inserted into an ink-jet printer.

4. Twenty-five photographs can be printed per hour in this manner.

Surveyors pointed out that the printing portion of this process takes far too long since they may be shooting more than 10 rolls in a week.

B. Muzzey stated that DHR was looking for an interim solution at this point. DHR has to deal with a wide range of clients and needs to set standards that will work for all of them. She was considering creating a set of standards specifically for professional architectural historians conducting survey work. To date, the DHR has been accepting Kodak professional paper, which seems to be discontinued, and Fuji Crystal. DHR will continue to request black and white negatives. She acknowledged that DHR needed to create a system for storing negatives.

[Charley Freiberg and Joyce McKay subsequently met with B. Muzzey to discuss a workable process for the present. Surveyors now have the option of sending their negatives to Charley for processing. He will give the processed negatives to Flash Photo (in person), and flash photo will send the prints and negatives to the surveyor.]

Derry-Londonderry, IM-0931 (201), 13065. Participant: Jamie Paine and Chris Bean, CLD.

Purpose of Meeting: To update those present on the status of the project and to receive NH Division of Historical Resources' staff determination of each alternative's impact on cultural resources.

OVERVIEW

Chris Bean provided a brief overview of the project. It was explained that the project had been on hold for two years. In order to ensure we have current information to make a preferred alternative selection, the CLD/Preservation Company team, has reviewed and updated relevant information for the last seven months. This included field review of resources, updating resource mapping, and reviewing impacts of the alternatives.

Chris reviewed the five remaining build alternatives (four off-alignment alternatives and one minor upgrade of NH Route 102). Two off-alignment alternatives each commence from either a northern or southern interchange location. The alternatives are as follows:

- A:** Southern interchange – to Folsom Road, through Ross' Corner and then along Tsienneto Road to its intersection with NH Route 102;
- B:** Southern interchange – through Derry Business Park to Ashleigh Drive, cross country route that bypasses Tsienneto Road, then ties into NH Route 102 at Tsienneto Road intersection;
- C:** Northern interchange – follows along NH Route 28 to Ashleigh Drive, cross country route that bypasses Tsienneto Road, then ties into NH Route 102 at Tsienneto Road intersection);
- D:** Northern interchange – follows along NH Route 28 to Ross' Corner and then along Tsienneto Road to its intersection with NH Route 102; and
- F:** Minor upgrade (three lanes, would remove parking through Downtown Derry) of NH Route 102 from approximately Derry Traffic Circle west to shortly beyond Derry/Londonderry town line.

Chris also explained the steps taken to avoid two historic properties located on Tsienneto Road, east of Scenic Drive. The proposal, which was shared at public meetings and based on input from residents in the past and requests from the Town, is to construct 11-foot lanes with 4-foot shoulders. In the vicinity of the most westerly historic property, there is a hedge on Tsienneto Road blocking intersection sight distance from Scenic Drive toward the historic property along Tsienneto Road that it is only good for about 15-20 mph. In order to get desirable 30 mph intersection sight distance, a 12-foot high forsythia hedge would need to be removed, a row of mature spruce trees would need to be removed in front of the house, and a sharp 20 mph crest vertical curve would need to be flattened. The proposed improvements in this area allow the trees in front of the house to remain so there is no impact to this historic property and the other historic property to the east. The result is intersection sight distance good for about 25 mph. The profile improvement will upgrade the stopping sight distance along Tsienneto Road to meet minimum 30 mph requirements.

CULTURAL RESOURCE REVIEWS

HISTORIC RESOURCES

Jamie Paine reviewed the steps completed to ensure that the cultural resources data is current. After CLD met with NH Division of Historical Resources (NHDHR), Preservation Company was asked to review each of the remaining alternative corridors to determine whether any changes had occurred to the eligibility of any potentially historic resources. After reviewing the area and meeting with NHDHR again, it was determined that the only potentially historic resources located on the four off-alignment alternatives (A, B, C, and D) were the two residential properties located at the eastern end of Tsienneto Road. It was determined that none of these alternatives would affect historic resources.

NHDHR determined that Alternative F would have an adverse effect upon historic resources. If this alternative were selected, a historic district form would need to be completed to document and determine if a West Derry Historic District exists. In addition, the removal of parking on NH Route 102/Broadway through downtown Derry would have a detrimental impact to the local businesses that are, for the most part, in historic buildings. This impact would not support one of the project's purpose and need of improving economic benefits within the Town. Harry Kinter stated that Section 4(f) would not be satisfied if the F Alternative were selected since there are alternatives with a lesser impact on cultural resources.

Yellow sheets were prepared and distributed by Preservation Company for use by NHDHR and for placement in the environmental impact statement.

ARCHAEOLOGICAL RESOURCES

NHDHR determined that whichever alternative is selected, a Phase 1B archaeological review will be required for that alternative. A professional archaeologist will be required to walk over of the preferred corridor and complete shovel test pits in potentially sensitive areas to determine whether archaeological deposits are present prior to the commencement of construction. The project would need to address all necessary phases of archaeology.

Portsmouth, BHS-X-T-0101(015), 13678. Participants: Kevin Nyhan; Lynne Monroe, Preservation Company; and Addie Kim (akim@hntb.com) and John Watters, HNTB.

The purpose of this meeting was to review the effects of the Memorial Bridge project and alternatives on the National Register-eligible Memorial Bridge Historic District and the individual NR-eligible elements that comprise the historic district. Effects on these individual elements (the Scott Avenue Bridge/ Memorial Park, Memorial Bridge, Kittery Viaduct, Badger's Island Roadway, Badger's Island Bridge, and John Paul Jones Park) were determined first and effects on the district as a whole were discussed at the end of the meeting.

Scott Avenue Bridge

Joyce McKay distributed yellow effects sheets for Scott Avenue and Memorial Park and indicated that DHR considers these properties inseparable. John Watters described the need for the proposed Scott Avenue Bridge replacement because of the deteriorated condition of the bridge. The proposed bridge replacement, with a two-span bridge, would remove three sets of piers from under the roadway, a benefit for drivers and pedestrians along the waterfront, with no other geometric changes to the roadway under the bridge. There would be no change above along the Memorial Bridge approach roadways. There would be a temporary impact for construction equipment and excavation for the roadway support in the north end of the park. The construction option with a complete roadway closure over 5 months would have less effect on overhead roadway than alternating one-way traffic (2-month closure, followed by 6-month alternating one-way traffic). Four design alternatives were evaluated that include the No Build alternative and three alternatives for three-span and four-span bridges. The No Build alternative is not practicable, due to the condition of the bridge, and other options would introduce more columns under the roadway, increasing the hazard to drivers and impediments to pedestrians.

Linda Wilson indicated that the Scott Avenue Bridge replacement would have an adverse effect on the integrity of all elements on the effects form (design, setting, workmanship, etc.). Joyce McKay indicated that the bridge had been documented through large format archival-quality photographs of the bridge. The original design drawing for the bridge still needs to be copied using this process. Carol Hooper indicated that only one design drawing was originally created for the bridge. With the exception of the photography of the plan, the HSR provides a detailed record of the Scott Avenue approach and the Memorial Bridge.

The consensus was that the visual result of the proposed design is similar to that of the existing bridge, but creates additional feeling of openness under the bridge and would improve safety. But, its replacement would be an adverse effect on this element and on the whole district. Harry Kinter inquired about the lighting design and indicated that consultation with the city to use lighting consistent with the city's Master Plan or city standards should be specified. It was agreed that if the city does not have a preference for lighting, then lighting that is consistent with either the age of the bridge or that is compatible with the character of the bridge should be used.

Jim Garvin indicated that in 1922, bulb and reflectors were used in the design. The original railing cannot be used on the bridge, since this type of rail is not acceptable under AASHTO standards. John Watters concurred that it would be impossible to replicate the old railing and meet NCHRP 350 crash testing requirements. Lynne Monroe suggested that a wall at the curb line could be used to allow the original railing to be installed. John Watters responded that use of a barrier would reduce the sidewalk width and would have a visual effect. Kevin Nyhan pointed out the potential

need to accommodate bicycles and asked whether they would be accommodated on the roadway or on the sidewalks. Steve Liakos responded that bicycles would be accommodated on shoulders, and the railings would be designed for 36 inches (not 54 inches as required for bicycle use). He also noted the need for vertical pieces (balusters) between posts to prevent people from climbing between posts on the railings and also noted that a snow fence on the bridge should be 5-feet high. Jim Garvin noted that old photographs seem to show chain link fence.

Joyce McKay summarized mitigation for Scott Avenue: complete documentation in the HSR by photographically copying plans, conducting some mitigation by design, and engaging in consultation on the railing and lighting. Harry Kinter concurred that the proposed design should be reviewed by FHWA, DHR, and the city.

Memorial Park (Part of the Scott Avenue Bridge)

Taking into account the city's current perspective, Joyce McKay indicated that the intent, then, is to reconstruct Memorial Park to its existing form or one closer to the original after it has been affected by bridge replacement. John Watters indicated that the best guess of how the contractor would construct the piers would involve an excavator and backhoe if the south bridge abutment is reconstructed. This would affect the northern triangle of the park, but would not impact the southern triangle of the park. John Watters mentioned that, to speed Scott Avenue construction, the abutment may be reused. This would involve driving piles and build behind the existing abutment (to the south) to a depth of 5 to 6 feet.

Jim Garvin inquired about the depth of the archaeological resources at the northern triangle and potential impact by the construction of the south piers to these resources. Joyce McKay indicated that the testing found that fill extended below 4 feet, the depth of archaeological testing in the south park triangle. Intact archaeological resources may exist below this level. Excavation in the park area or along the waterfront would require archaeological monitoring and would involve work stoppages if archaeological deposits are found. Joyce McKay indicated the need for the archaeologist to be present when taking borings in this area. It was discussed that even use of 2-inch to 3-inch borings may still yield valuable information about archaeological deposits. Addie Kim indicated that there will be environmental testing in this area during borings, due to the presence of a coal tar layer on adjoining Harbour Place property and Groundwater Management Permits for this property and a former gas station. It was mentioned that the archaeologist, Kathy Wheeler of IAC, has hazmat training.

Harry Kinter mentioned that coordination with the city on the plans for the memorial should be performed. John Watters indicated that the city plans to install a memorial to Martin Luther King, Jr. on the site. Addie Kim mentioned that the city does not yet have plans developed for the Martin Luther King, Jr. memorial site. Joyce McKay suggested leaving the language in the MOA flexible so that FHWA and DHR could be working with the city, and it was discussed that the reconstruction of the park should not preclude later city plans for the park. Because the Memorial Park is part of the Scott Avenue Bridge, the effect to this element of the project would still be adverse even though the park would be reconstructed in a configuration similar to the existing or closer to the original design.

Memorial Bridge

John Watters indicated that seven alternatives, including the No Build, a tunnel alternative, limited rehabilitation, and alternatives for complete bridge replacement, were evaluated for the Memorial Bridge, as shown in the matrix that was distributed. Of these alternatives, the lift span rehabilitation

and lift span replacement were carried forward for further evaluation. The work on the flanking spans would be the same for either alternative (replacing deck, replace/rehabilitate steel members, replace timber sidewalk, relocate operator's control house to south tower, railing repair). He stated that because of the need to see activity on the bridge, the control house would be relatively transparent. The lift span rehabilitation would involve the same type of repairs, and the steel grating on the deck would be filled in to create solid deck surface. For the lift span replacement, a new lift span would be brought in with solid steel members, but no lacing. The new lift span would not have X-bracing, and would have a more streamlined appearance. The dead weight would be about 200,000 pounds greater, and there would be a new solid deck on the lift span.

The existing machinery would be replaced, but it was discussed that the sheaves were replaced in the 1930s-1940s, and the ropes have been replaced over time. Mike Johnson of the Maine Historic Preservation Commission indicated that the Historic Structures Report shows that the sheaves were replaced in 1940-1941. It was agreed that the rehabilitation of the lift span would involve (c) on the Effects Form, "otherwise adverse effect may be considered not adverse," because the rehabilitation preserves the architecture of the bridge. This decision applies only to this element of the district and to this option. Mike Johnson indicated that the MHPC agrees with the no adverse effect finding. Jim Garvin stated that DHR would accept the upgrading of the mechanical system as the inevitable evolution of the structure. The parts of the system were essentially being replaced in kind.

It was discussed that replacement of the lift span would have an adverse effect on the Memorial Bridge and the district. A portion of the mitigation would include documentation, much of which is already complete by preparing the HSR. Consultation with NH DHR would be performed to determine which design plans would be copied. Jim Garvin indicated that the original 1922 contract drawings had been updated by copying selected later plans for updates performed to the bridge over 50 years.

Joyce McKay inquired whether copying of plans would be required for lift span rehabilitation. It was discussed that some selected plans would be copied. Carol Hooper indicated that these plans are not voluminous, there are 12 Waddell period drawings. Jim Garvin indicated that in both instances the plans should be copied archivally. Jim Garvin indicated that the copying of the 12 original plans would transform the finding for the rehabilitation of the lift span to no adverse effect.

Jim Garvin indicated that there would be need for project-wide mitigation for the district if the lift span were replaced. Harry Kinter concurred that memorialization of the bridge should be performed.

Maine Approach Span to Memorial Bridge

For the Maine approach span, also referred to as the Kittery viaduct, the deck and railing would be repaired, the sidewalk surface replaced, and miscellaneous steel repairs would be performed. Mike Johnson indicated that this work would have no adverse effect. Joyce McKay indicated that documentation is in the Historic Structures Report, and large format photos would be sent to the MHPC. They have a copy of the draft HSR. Jim Garvin concurred with the No Adverse Effect finding. Jim Garvin inquired whether the structure was individually eligible for the National Register. Lynne Monroe stated that MHPC evaluated the approach and lift span together. In 1984, there were changes to the bridge. Joyce McKay reiterated that there would be a No Adverse Effect finding.

Badger's Island Roadway, Badger's Island Bridge, John Paul Jones Memorial Park

John Watters indicated that limited work is proposed east of the Maine approach span. Grinding down the pavement and repaving would be performed along 50 feet of the approach roadway on Badger's Island. The reduction of the pavement would also have the effect of regrading the roadway. There is no work proposed on the Badger's Island Bridge or in John Paul Jones Memorial Park.

Mike Johnson indicated that repaving of the Badger's Island roadway would have no adverse effect. He indicated that he would have to look at the plans for archaeology. John Watters clarified that regrading would involve stripping the pavement. Mike Johnson indicated that this would be no adverse effect, and he would look at the specifics. But, it sounded like there would be no impact on potential archaeological resources. Joyce McKay indicated that Kathy Wheeler, IAC archaeologist, spoke with MHPC regarding archaeological impacts, and there were no issues of concern identified in Maine at that time.

Memorial Bridge Historic District

The umbrella aspect of the impacts on the entire historic district were discussed. It was discussed that the Badger's Island Bridge was not built as part of the Memorial Bridge Historic District; it is a replacement bridge. Mike Johnson verified that the existing control house would stay where it is on top the Memorial Bridge lift span. John Watters indicated that the control house will stay in place and that the operator's house will be relocated. Jim Garvin indicated the NH DHR also thinks that it is important that the control house remain on the lift span. It was decided that the lift span rehabilitation would involve no adverse effect on the district.

The lift span replacement was discussed. Its replacement would adversely effect the Memorial Bridge and the district. Harry Kinter indicated that mitigation for the entire district should involve memorializing what the original bridge looked like, with educational materials, such as a park marker. Jim Garvin commented that, at this point, there is no interpretive exhibit in place. If the lift span is replaced, an interpretive exhibit could be included in the mitigation. Consultation between the parties would be required. Linda Wilson stated that, if the lift span were replaced, further consultation with all parties about the design and memorialization would be needed. Mike Johnson emphasized that, if the lift span is replaced, a good, concise justification for why this alternative was chosen should be prepared.

Harry Kinter indicated that a Programmatic Section 4(f) Evaluation would be prepared, since the taking of the Scott Avenue Bridge will have an adverse effect. If the lift span replacement is proposed, he mentioned that an individual 4(f) may apply to the Memorial Bridge. Kevin Nyhan indicated that this would still be a programmatic 4(f). Harry Kinter stated that Scott Avenue would not have an adverse effect on the entire district, so that (c) on the Effects Form would apply, since they would be mitigating the Scott Avenue replacement, and the replacement of Scott Avenue does not have a district-wide effect. Linda Wilson indicated the design of the replacement lift span would be in consultation with all parties. Jim Garvin stated that the details of the existing and proposed lift spans differ. The existing bridge has gusset plates, the proposed lift span would have welded joints with no gusset plates and the truss would look different.

Portsmouth Historic District

The committee agreed that the rehabilitation alternative would not have an adverse effect on the

larger historic district in downtown Portsmouth. Harry Kinter indicated that the only issue would be with replacement of the lift span, producing visual impact from Prescott Park and the river walk. Mitigation for this effect would be the same as for the Memorial Bridge Historic District. Jim Garvin indicated that an exhibit within Prescott Park from the old Walker Cove area, part of the historic district, would be the logical place. The exhibit would be determined in coordination with the municipality, FHWA, and NHDHR. Linda Wilson indicated that NH DHR preferred rehabilitation of the lift span. Harry Kinter indicated that there could be a public education component, with a pamphlet developed for the school system, as part of the memorialization.

Historic Cement. Participants: Linda Wilson and Glen Roberts

Linda Wilson had requested that this topic be placed on the agenda. She observed that Historic Harrisville has discovered what appears to be natural hydraulic cement in use on the buildings there and perhaps throughout the Monadnock Region. She was wondering whether Materials and Research could determine whether it is natural cement. Identifying the source in New Hampshire would be of great benefit to municipalities that are trying to maintain their historic buildings.

Glen Roberts stated that their chemists routinely tested Portland cement for their constituents. Materials and Research does perform testing for different agencies. He indicated that Materials and Research was now taking application for research projects and that this could be a possible candidate. The deadline is April 3. Application involves only the submission of a short problem statement including the value of the projects and its potential impacts. One outcome of such a project would be to set up standardized testing protocols.

Dover 14287:. Participants: Kathy Wheeler and Alexka Chan, IAC; Marc Laurin and Chris Waszczuk

The phase II report for testing at the Dover Park and Ride is currently under completion. However, because it had been assumed that the current testing would be sufficient investigation for the midden site and because the project would be advertised in the next few months, K. Wheeler wanted to bring the importance of the site to NHDOT's and NHDHR's attention.

K. Wheeler and A. Chan explained that the 6-7 m by 25 m midden on the property contained a dense deposit from primarily one tight time period between 1890 and 1920. The midden is tied to one property owner, the Couteau family, that is associated with the property, and the deposit is undisturbed. From the ten STP's excavated to date, the IAC lab has reconstructed 104 ceramic and 110 glass vessels. One of the questions addressed by the study looked at gender roles of this low-income, immigrant family in contrast to the main-stream thought about female roles in this period. The study offers an alternative ideal for roles within the working class family. The best approach would be to leave this deposit in the ground. However, barring this approach, another tact would be to excavate a 5% sample, 25-.5X.5 meter units, and perform the initial processing. It was suggested that SCRAP could catalogue the collection with direction from IAC including presentations on what the site represents and identifying the different artifact forms. The project would thus have an educational value as well as preserve data for future study.

E. Feighner thought that this treatment would be appropriate. She will prepare a determination of eligibility for the site for the next DOE meeting.

Stone Wall Policy: Participants: Linda Wilson.

A copy of the stone wall policy was given to Linda Wilson. Its circulation will be discussed at the April monthly meetings.

****Memos:** Stoddard 14540G; Newington Dover 11238, Lee-Epping 14452

Submitted by Joyce McKay, Cultural Resources Manager

c.c.	J. Brillhart	K. Cota	N. Mayville	Bill Cass
	C. Barleon, OSP	C. Waszczuk	D. Lyford	
	V. Chase	R. Roach, ACOE	H. Kinter, FHWA	

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